Dog Burials from the Eighteenth Century Cherokee Town of Chattooga, South Carolina

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ABSTRACT—Archaeological excavations recovered the remains of three dogs from two pit-features at the eighteenth century village site of Chattooga in South Carolina. The three individuals were small to medium-sized animals. Observations on one animal (Dog 3) indicate extreme age at death, suggesting that the dog was given special care during its life. These occurrences are consistent with archaeological and historical information about the role of dogs in Cherokee society.

Archaeological investigations at the historic eighteenth century town of Chattooga, Oconee County, South Carolina, recovered the remains of three dogs which were deliberately interred in pit-features (Schroedl 1995). These burials are an example of a practice documented at other historic Cherokee sites. Analysis of the skeletal remains shows that some dogs were so incapacitated by old age that they must have received special care for them to have lived so long. Intentional burial also attests to the regard afforded these animal regardless of their age at death.

Reported from two village sites in East Tennessee are three historic period Cherokee dogs and four additional skeletons which may represent historic Cherokee or late prehistoric Mississippian period (A.D. 1400 to 1600) associations (Parmalee and Bogan 1978; see also Bogan 1976, 1980, 1983; Bogan et al. 1986). Each animal was about the size of a beagle and was deliberately buried. Significantly, Dog Burial 1 at the Chota site was an older animal, which, because it was arthritic and had a deformed right hind foot, must have received special care during its life (Parmalee and Bogan 1978:105). Isolated elements of domestic dogs are infrequent in late prehistoric and historic faunal samples in East Tennessee, suggesting that the Cherokee seldom ate dogs and infrequently discarded them with refuse. In other areas of

the Southeast, dogs may have been used more frequently as a food source (Mooney 1900:26) or consumed in ritual contexts (Swanton 1911:129). In general, however, wide-spread use of dogs for food or ritual was uncommon in the Southeast.

Cherokee use of dogs is poorly documented, but the animals were obviously kept as pets, sometimes eaten, and perhaps used in hunting as recorded for other southeastern groups (Swanton 1946:345). Southeast Indians once may have raised distinctive breeds of dogs, but soon after historic contact most dogs were probably hybrids of European and aboriginal animals (Parmalee and Bogan 1978:100-101). Most dogs probably scavenged for food in village areas and received infrequent handouts. The animals were tolerated but generally not provided great care except for the occasional individual that was treated with some respect or reverence such as the ones archaeologically represented by intentional burial.

Despite their marginal role in Cherokee economic life, dogs also are represented in myths and supernatural beliefs. The howling of a family dog, for example, was an omen of sickness and death in the family (Mooney and Olbrechts 1932:37). Dogs also played a prominent role in myths about the great deluge and the creation of the Milky Way (Mooney 1900:259, 261). Another story describes how dogs were once wild, and how they replaced wolves who were once domesticated. In Cherokee sacred formulas, dogs sometime occur as a metaphor for spiritual healing. For example, spiritual deer chief, the cause of rheumatism, is overcome by the spirit of the dog who is more powerful and the natural enemy of the deer (Mooney 1886:346-347).

THE CHATTOOGA DOG REMAINS

In 1984, test excavations were made in the area of a domestic structure and the deteriorated skulls of two animals (Dog Burial 1 and Dog Burial 2) were recovered from a pit-feature (Feature 3) associated with the building. The pit measured 50 by 70 cm and 11 cm deep (Elliot 1984:30). The position of the skulls on the pit floor and the size of the pit suggest that the animals had been placed there together. Decomposition of the postcranial skeletons of both animals was so complete that none of these bones was observed or recovered for study.

In 1994, excavations at Chattooga in the vicinity of the village council house or townhouse, approximately 500 m from the area studied in 1984, revealed a second pit-feature containing the remains of a single animal (Dog Burial 3) (Fig. 1). This pit, Feature 11, measured 86 cm long, 70 cm wide, and 42 cm deep. It may have been originally dug for another purpose because it was much deeper than needed to



Fig. 1. Dog Burial 3 in situ, note extreme flexure of neck, view south (photograph by Gerald F. Schroedl).

accommodate the dog, and approximately 20 cm of fill had accumulated in the pit when the animal was interred. The position of the bones indicates that the animal was laid on its right side so that its back followed the curvature of the pit wall. The dog's head was bent forward and under the animal's neck. It is impossible to determine whether this was done after the dog was dead or whether this had caused its death. Given the relationship between the skull and the pit wall, it appears that this was done because the dog's neck was too long to fit the burial pit.

The animal's bones were in poor condition, but most of the skull was recovered and could be reconstructed (Figs. 2 and 3). Elements of the postcranial skeleton were recovered, but none was well enough preserved to obtain measurements or to identify any anomalies or bone pathologies that might have been present. At some time after the dog's interment, a prepared clay hearth was built partially covering the pit outline. It is impossible to determine if this event was behaviorally related to the dog's death and burial.

DOG BURIAL 1

The remains of this individual consisted of isolated teeth, cranial fragments, and sections of both lower jaws with several teeth in place

Table 1. Skull, mandible, and tooth measurements (mm) of dog burials recovered at the Chattooga site, South Carolina (format follows Hagg 1948).

Element/Measurement	Dog 1	Dog 2	Dog 3
Total occipital length:			
Alveolus I to posterior occipital crest (est)			180.0
Basal length (est)			153.0
Palatal length (est)			86.0
Width of zygomatic arch			95.0
Supraorbital width			49.5
Interorbital width			37.6
Width at canines			36.0
Width of palate at M ¹			60.0
Least cranial width (posterior to suprorbitals)			35.6
Alveolus I ¹ to M ²			80.0
Alveolus C ¹ to M ²			72.3
Alveolus P ² to M ¹			52.3
Alveolus M ¹ to M ²	20.2	17.4	
Length M ¹	13.7	12.3	
Width M ¹	17.6	15.0	
Length M ²	7.3	6.0	
Width M ²	10.6	8.1	
Lenght P ²			10.4
Length P ³			11.8
Length P ⁴	18.6	16.7	18.4
Length left C ¹		2011	16.0
Length right C ¹			11.0
Alveolus I ₁ to M ₃			90.0
Alveolus C_1 to M_3			82.0
Alveolus P_1 to M_3			72.8
Alveolus P ₂ to M ₃			67.0
Alveolus P ₃ to M ₃			58.4
Alveolus P ₄ to M ₃	46.0		48.4
Alveolus P_4 to M_3 Alveolus P_4 to M_3	46.2	41.1	70,7
	40.2	31.3	36.6
Alveolus M ₁ to M ₃		31.1	30.0
Alveolus M ₁ to M ₃		31.1	8.4
Length left P ₂			10.3
Length left P ₃	11.9		11.7
Length left P ₄	11.9	10.2	11.7
Length right P ₄	22.4	10.3	21.2
Length left M ₁	22.4	19.6	21.2
Length right M ₁	22.1	19.7	10.7
Length left M ₂	9.1	7.5	10.7
Length right M ₂	9.3	7.7	
Length left M ₃	4.6	26.2	
Length root/crown C		36.3	104.5
Condylo-symphysis length	The state of the state of		124.5

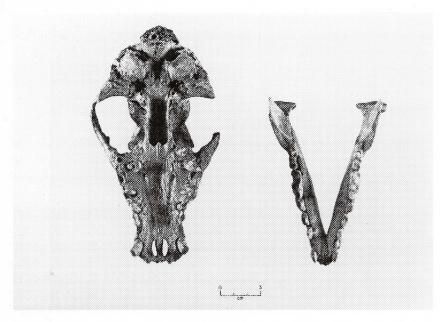


Fig. 2. Occlusal view of the skull and lower mandible of Dog 3, showing tooth loss and extreme cusp wear (photograph by Miles Wright).

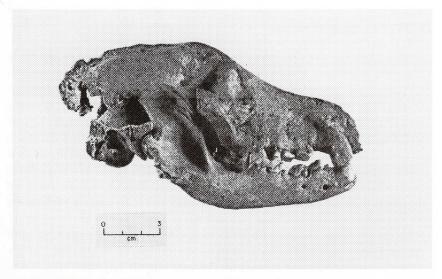


Fig. 3. Right lateral view of the skull and mandible of Dog 3, showing tooth wear and bone lesions around the roots of P^{3-4} , M^1 , P_3 , and M_{1-2} (photograph by Miles Wright).

in each. Although fragmentary, measurements on the upper as well as lower premolar P_4 and molars (M_1 , M_2 , and M_3), and observations of rounding and wear on the molar, indicate that this was a mature individual (Table 1).

Dog Burial 2

The remains of this individual also consisted of fragmentary portions of the cranium, incomplete and broken pieces of the upper and lower jaws, and isolated teeth and tooth fragments. Measurements of the teeth and alveoli indicate that this also was a mature dog with a skull similar in size to Dog Burial 1 (Table 1).

Dog Burial 3

Except for the skull and mandibles, Dog Burial 3 also was poorly preserved. None of the axial skeleton was complete enough to obtain measurements, so the stature of the animal could not be determined. Recovered fragments or sections of the postcranial skeleton included seven cervical and two thoracic vertebrae, one scapula, both ulnae, one radius, one humerus, one tibia, one femur (represented by the head), acetabulum, and six elements from one foot.

The loss of many teeth and the wear pattern on those remaining suggest the animal was quite old when it died. All incisors in both upper and lower jaws, plus the right first premolar in both, were lost and alveoli completely absorbed. Only the root of the left P¹ remained. Both right and left P²⁻³ were crowded and overlapped. Except for a fragment of a root of the left P⁴ and the worn base of the hypocone of the left M¹, the left P⁴, M¹, and M² had been lost or worn away; most of the alveoli of the molar roots had been absorbed. It is apparent that with the loss of these teeth, important in tearing, crushing, and chewing food, the dog was forced to use the right side for mastication.

All remaining cheek teeth on the right side in both upper and lower jaws exhibit extreme wear (see Figs. 2 and 3). This is especially noticeable when observing the greater degree of wear on all teeth on the right side in both the upper and lower jaws compared with those on the left side. The occlusal patterns of the right M¹-² were completely worn away. Only the smooth base of the M² hypocone remained, and the surface wear on the M¹ had been so intense as to not only erode away the cusps but also to narrow the tooth in the hypocone/protocone area. The right C¹ also exhibited greater wear than the left C¹, being 5.0 mm shorter. The right C¹ had a pronounced groove on the lingual surface, possibly resulting from continual pulling at or chewing of

food on the right side. Both canine teeth in the lower mandibles were worn down to smooth nubs, exposing the nerve canals, and apparently projected little beyond the gum line. In addition to tooth wear and loss, the animal suffered from several gum lesions or abscesses, judging by enlargement of alveoli of the right P^{3-4} , M^1 , P_3 , and $M_{1,2}$.

CONCLUSION

The cranial proportions of Dog Burial 3 are very similar to those of a beagle, although the muzzle is slightly broader and the rami of the mandibles are somewhat more massive. The dentition exhibits extreme wear, loss, and abscessing, an indication of the animals advanced age. Poor preservation of the postcranial skeleton prohibited determination of stature. However, the most complete limb element, a 103.0 mm section of the left ulna, including most of the semilunar notch, approximates the proportion of a forelimb of a beagle-sized dog. This compares favorably with the stature of the dogs recovered at Chota, especially Dog Burial 1 (see Parmalee and Bogan 1978: Table 1). This dog also was infirm when it died, attesting to the care both must have received as they aged. The fragmented skulls and dentition of Dog Burials 1 and 2 at Chattooga also represent mature individuals of comparable size. These data suggest that there was little size variability in historic Cherokee dogs.

Intentional burial of dogs by Native Americans in eastern North America is well documented, this trait beginning over 7,000 years ago (Morey and Wiant 1992). This implies that at least some individuals attached a special meaning or feeling for a particular animal. Ethnographic accounts, however, provide sparse information on the kinds of "breeds" of dogs kept by southeastern groups, especially the Cherokee. Dogs probably played a minimal role in the Cherokee economy, but they were appropriately represented in social and ceremonial life as respected spiritual forces. Intentional burial of dogs at Chattooga thus is consistent with the archaeological and ethnographic occurrence of dogs in the Southeast.

ACKNOWLEDGMENTS—Archaeological and ethnohistorical research at the Chattooga Site were sponsored by the United States Forest Service and the University of Tennessee, Knoxville. We thank Robert Morgan and James Bates of the Forest Service and Sharon Perkul of the Institute of Archaeology and Anthropology, University of South Carolina, for making the dogs recovered in 1984 available for study.

LITERATURE CITED

- Bogan, A. E. 1976. A zooarchaeological analysis of vertebrate remains from Chota-Tanasi, a historic Cherokee village in East Tennessee. M.A. Thesis. University of Tennessee, Knoxville.
- Bogan, A. E. 1980. A comparison of late prehistoric Dallas and Overhill Cherokee subsistence strategies in the Little Tennessee River Valley. Ph.D. Dissertation. University of Tennessee, Knoxville.
- Bogan, A. E. 1983. Faunal remains from the historic Cherokee occupation at Citico (40MR7), Monroe County, Tennessee. Tennessee Anthropologist 8: 28-49.
- Bogan, A. E., L. LaValley, and G. F. Schroedl. 1986. Faunal remains. Pages 469-514 in Overhill Cherokee archaeology at Chota-Tanasee (G. F. Schroedl, editor) Department of Anthropology, Report of Investigations 38, University of Tennessee, Knoxville.
- Elliot, D. T. 1984. Archaeological Testing of Five Sites on the Sumter National Forest, South Carolina. Cultural Resources Report 85-4, Francis Marion and Sumter National Forests. United States Forest Service, Columbia, South Carolina.
- Haag, W. G. 1948. An osteometric analysis of some aboriginal dogs. Publications of the Department of Anthropology, University of Kentucky, Reports in Anthropology 7:107-264.
- Mooney, J. 1886. The sacred formulas of the Cherokees. Bureau of American Ethnology, Seventh Annual Report. Washington D.C.
- Mooney, J. 1900. Myths of the Cherokee. Bureau of American Ethnology, Nineteenth Annual Report, Washington D.C.
- Mooney, J., and F. Olbrechts. 1932. The Swimmer manuscript: Cherokee sacred formulas and medicinal prescriptions. Bureau of American Ethnology, Bulletin 99, Washington D.C.
- Morey, D. F., and M. Wiant. 1992. Early Holocene domestic dog burials from the North American Midwest. Current Anthropology 33:224-229.
- Parmalee, P. W., and A. E. Bogan. 1978. Cherokee and Dallas dog burials from the Little Tennessee River Valley. Tennessee Anthropologist 3:100-112.
- Schroedl, G. F. 1995. A summary of archaeological studies conducted at the Chattooga site, Oconee County, South Carolina, 1989-1994. Unpublished report submitted to the United States Forest Service, Columbia, South Carolina.
- Swanton, J. R. 1911. Indian tribes of the Lower Mississippi Valley and adjacent coast of the Gulf of Mexico. Bureau of American Ethnology Bulletin 43, Washington, D.C.
- Swanton, J. R. 1946. The Indians of the southeastern United States. Bureau of American Ethnology Bulletin 137, Washington, D.C.